

**BEST AVAILABLE COPY**

**DT 24 39 587 A1**

**51 International Classification A 61 N 3-00**

**19 FEDERAL REPUBLIC OF GERMANY**

**GERMAN PATENT OFFICE**

**11 Publication Document 24 39 587**

**21 Reference: P 24 39 587.7**

**22 Application Date: 8/17/74**

**43 Publication date: 2/27/75**

**30 Union Priority:**

32 33 31            8/23/73 Great Britain 39991-73

**54 Title: Electrical Surgical Device**

**71 Applicant: Matburn (Holdings) Ltd., London**

**74 Representatives:** Redies, F., Dr.-Engr. Dr.jur.; Redies, B., Certified Chemist, Dr. rer. nat.; Türk, D., Dr.; Gille, Ch., Certified Engineer; Patent Attorneys, 4000 Dusseldorf, Germany

**72 Inventors: Blackett, John Harold, London**

**BEST AVAILABLE COPY**

The invention relates to an electrical surgical device.

Such a device is connected with the hazard of electrocution or electrical shock. This particularly applies to an electrical surgical generator whose electrodes are directly connected to the patient.

In a conventional electrical surgical generator, a plate electrode is connected with a ground or a chassis connection whereby the patient's body lies directly on a grounded surface or a surface connected with the chassis. One of the most significant occasions for an electrical shock is the flow of an electrical current from a source with applied voltage that is in contact with the patient via the plate electrode to the ground. This voltage source may be an electrode from another component of the system that becomes electrically conductive because of an internal fault.

**BEST AVAILABLE COPY**

Patent Claim 1:

Electrical surgical device

characterized by

a monitoring device in the form of a voltage-dependent circuit (8), that is triggered by a rise in voltage of the device with respect to ground or the chassis by more than a pre-determined amount in order to create a control signal, to switch off a corresponding device (11) reacting to this control signal and/or to create an alarm signal.

1

THIS PAGE BLANK (USPTO)